

The diagram illustrates an A/F ratio sensor system. At the top, a horizontal line represents the A/F ratio, with 'LEAN' on the left and 'RICH' on the right, and a double-headed arrow labeled I_p . Below this, a circuit is shown. A 'SENSOR ELEMENT' (10) is connected to a reference voltage 'Ref1' (23) and a feedback loop. The feedback loop consists of a resistor network (R1, R2, R3, R4, R5) and two operational amplifiers (21, 31). The output of the first op-amp (21) is connected to the sensor element. The output of the second op-amp (31) is connected to the feedback loop. The circuit is labeled with various components and their connections.

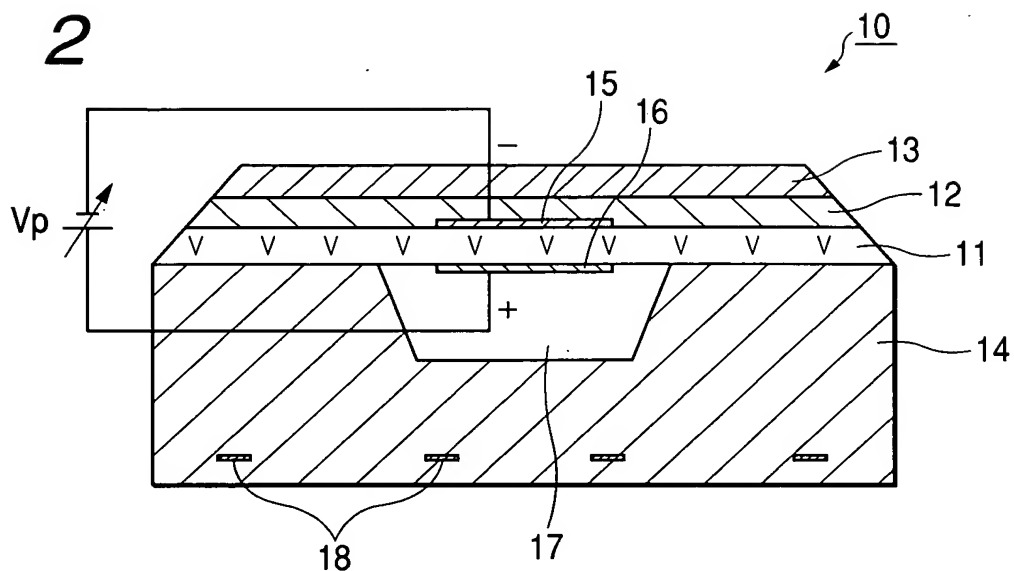
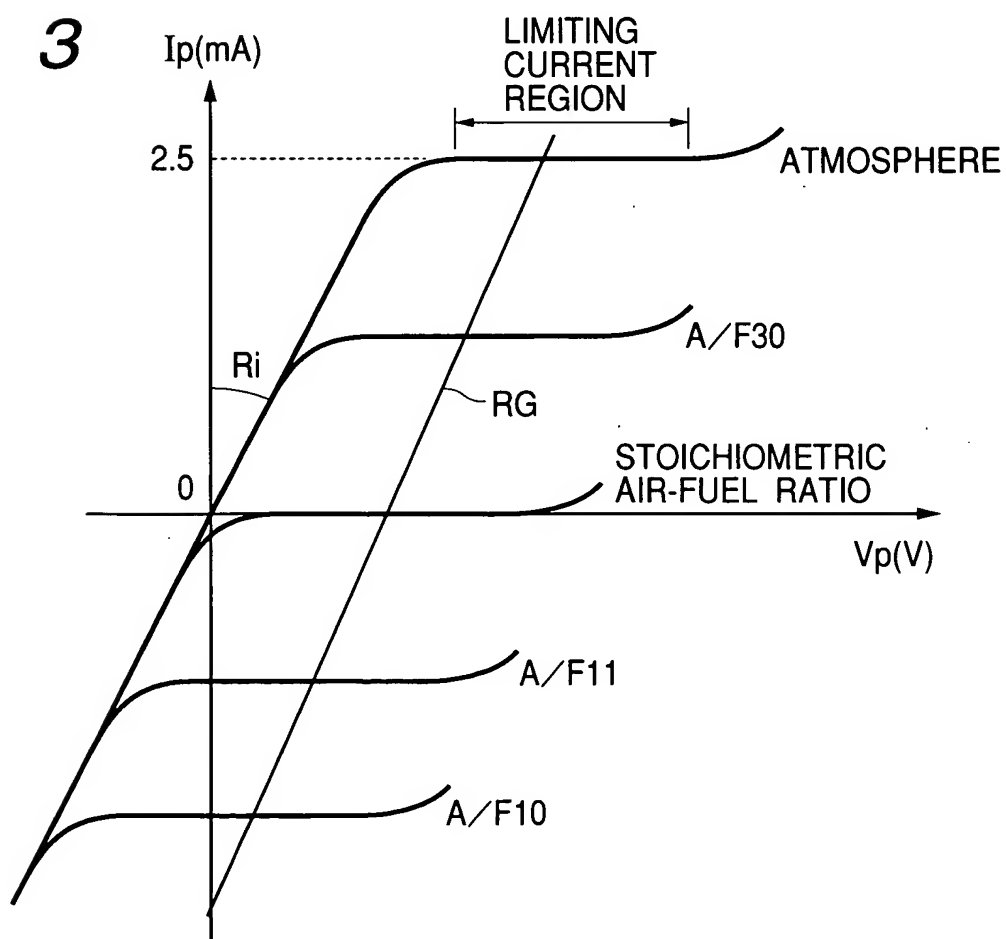
FIG. 2**FIG. 3**

FIG. 4A

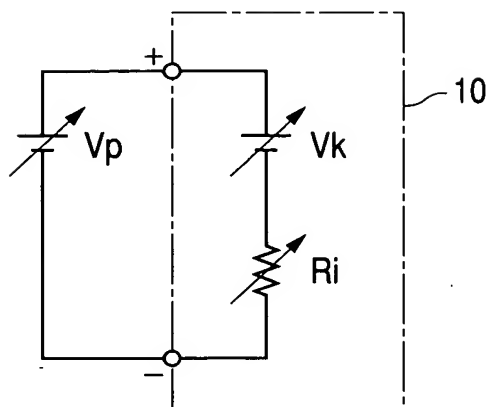


FIG. 4B

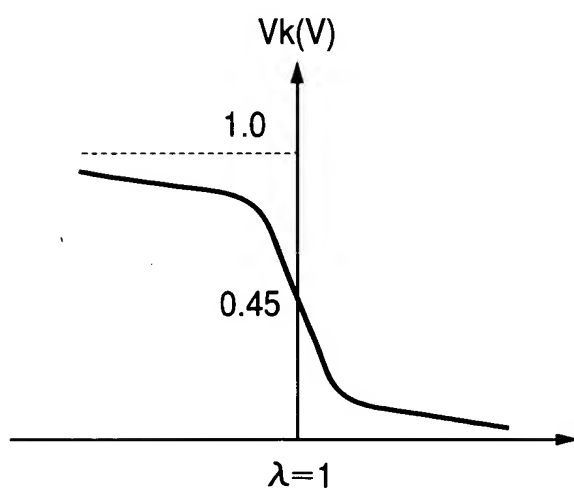


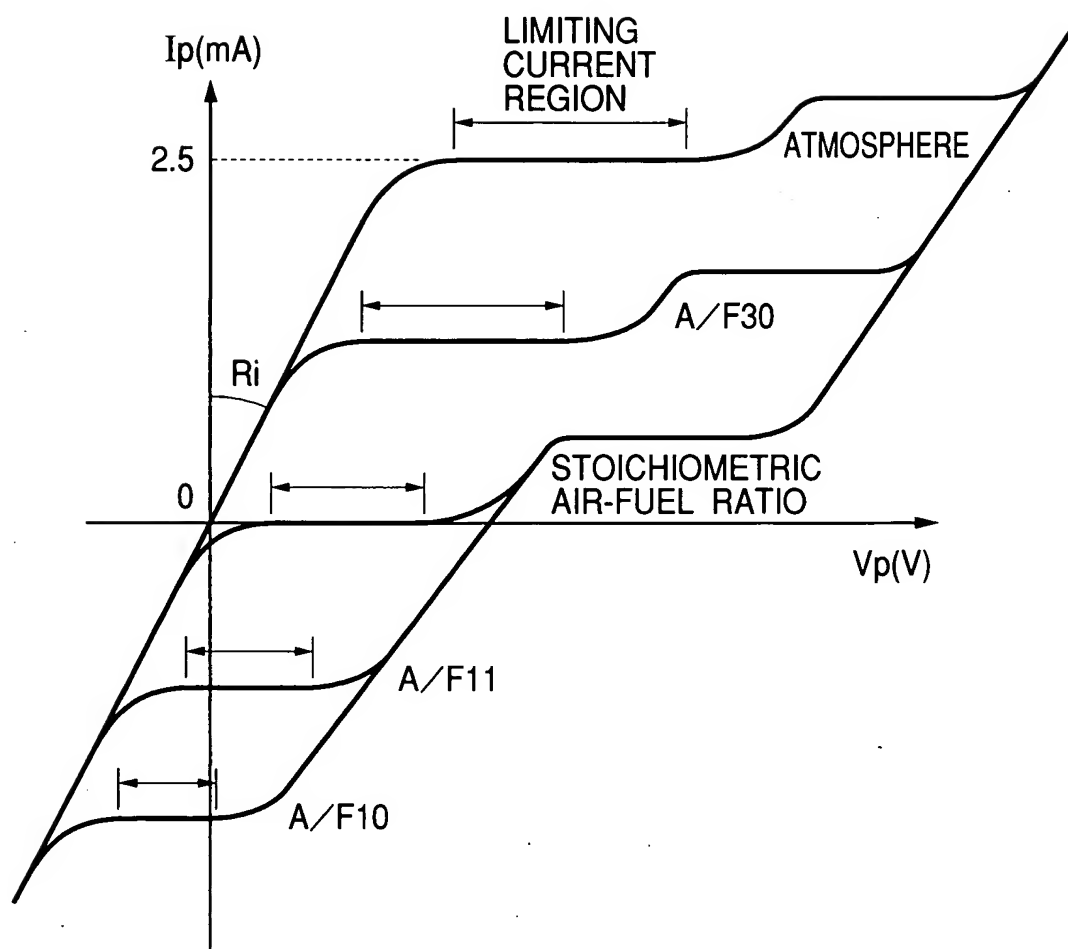
FIG. 5

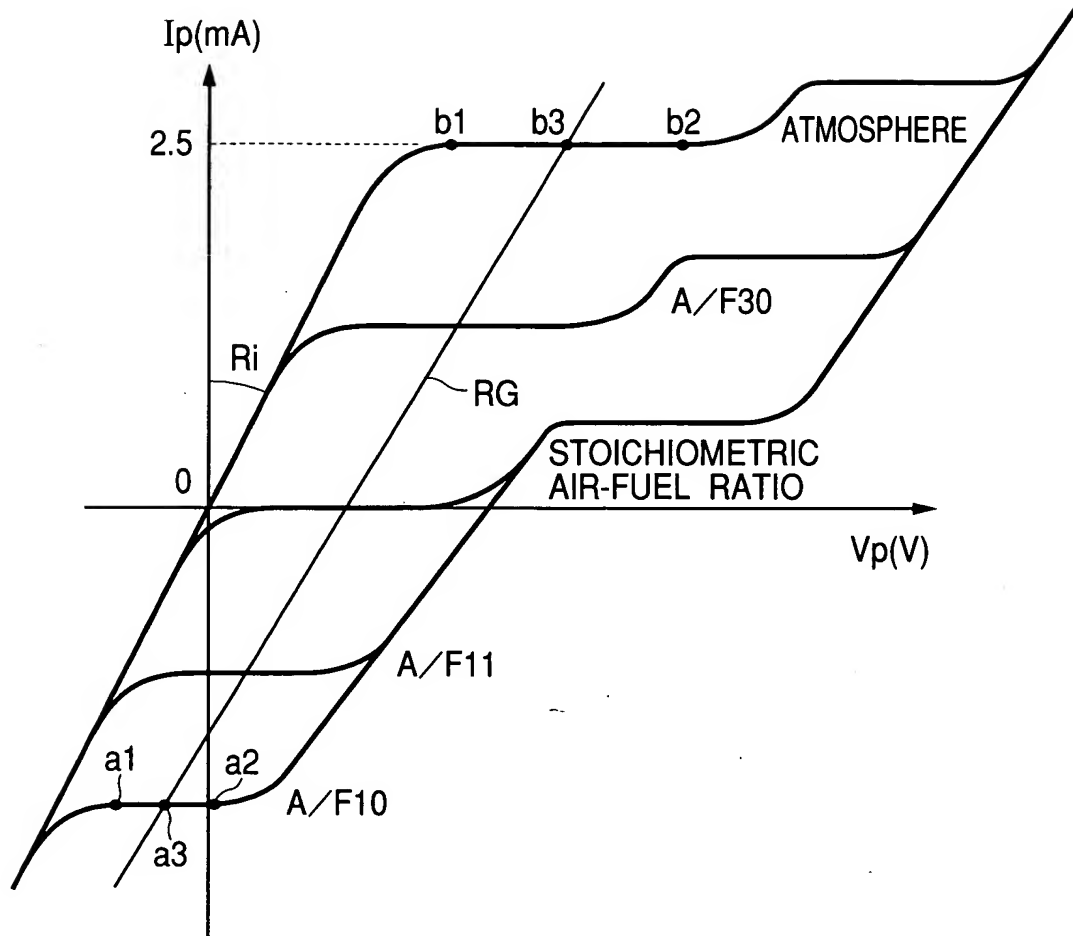
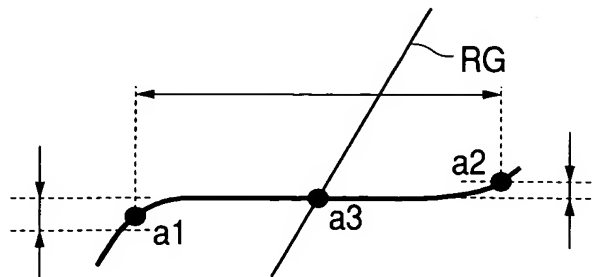
FIG. 6**FIG. 7**

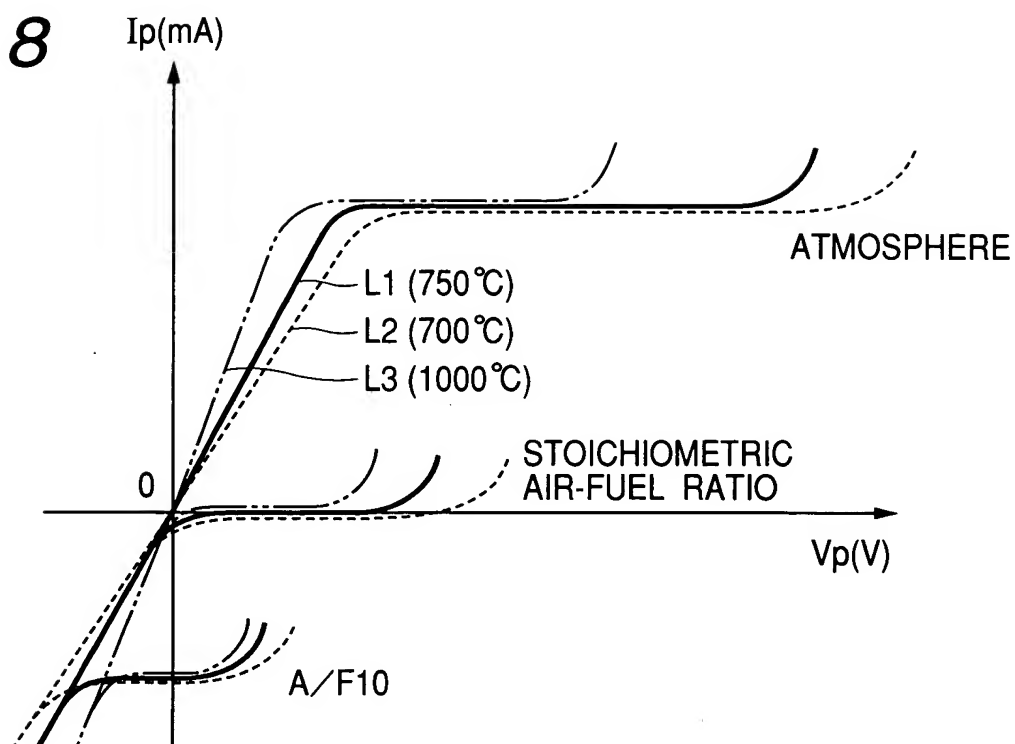
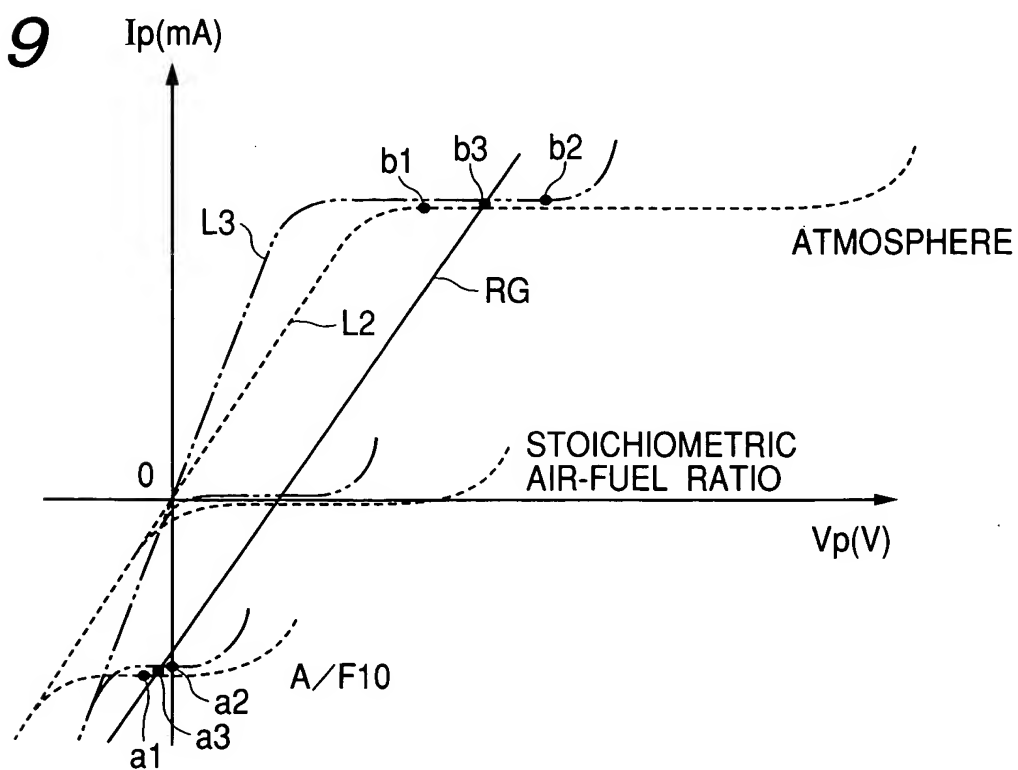
FIG. 8**FIG. 9**

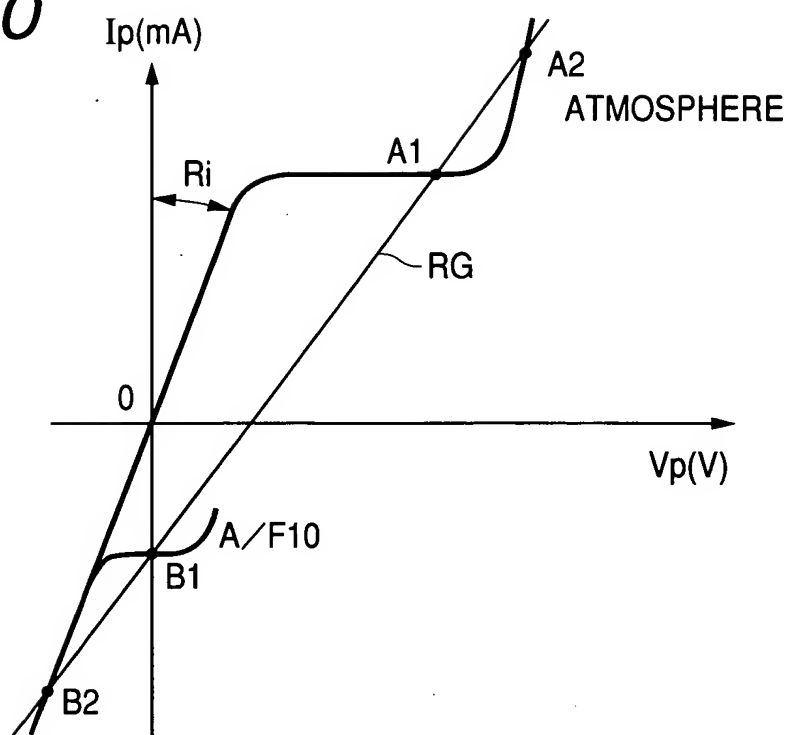
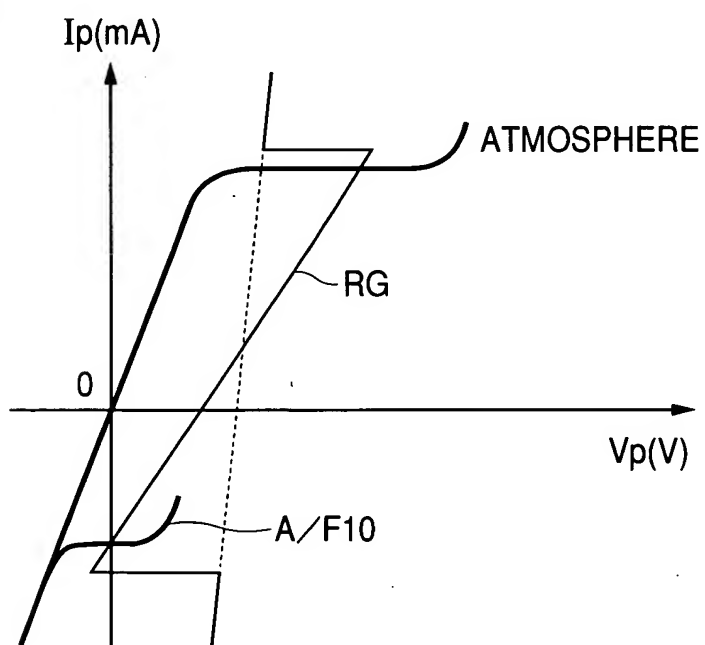
FIG. 10**FIG. 11**

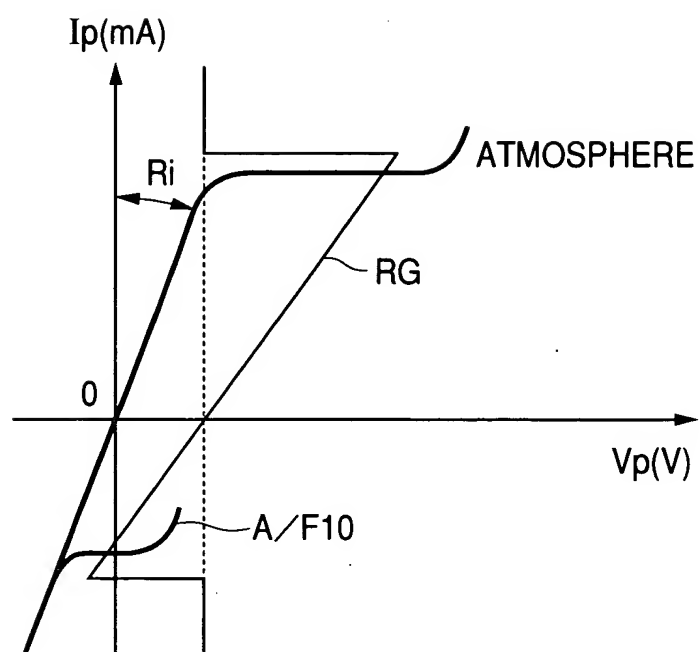
FIG. 13

FIG. 14

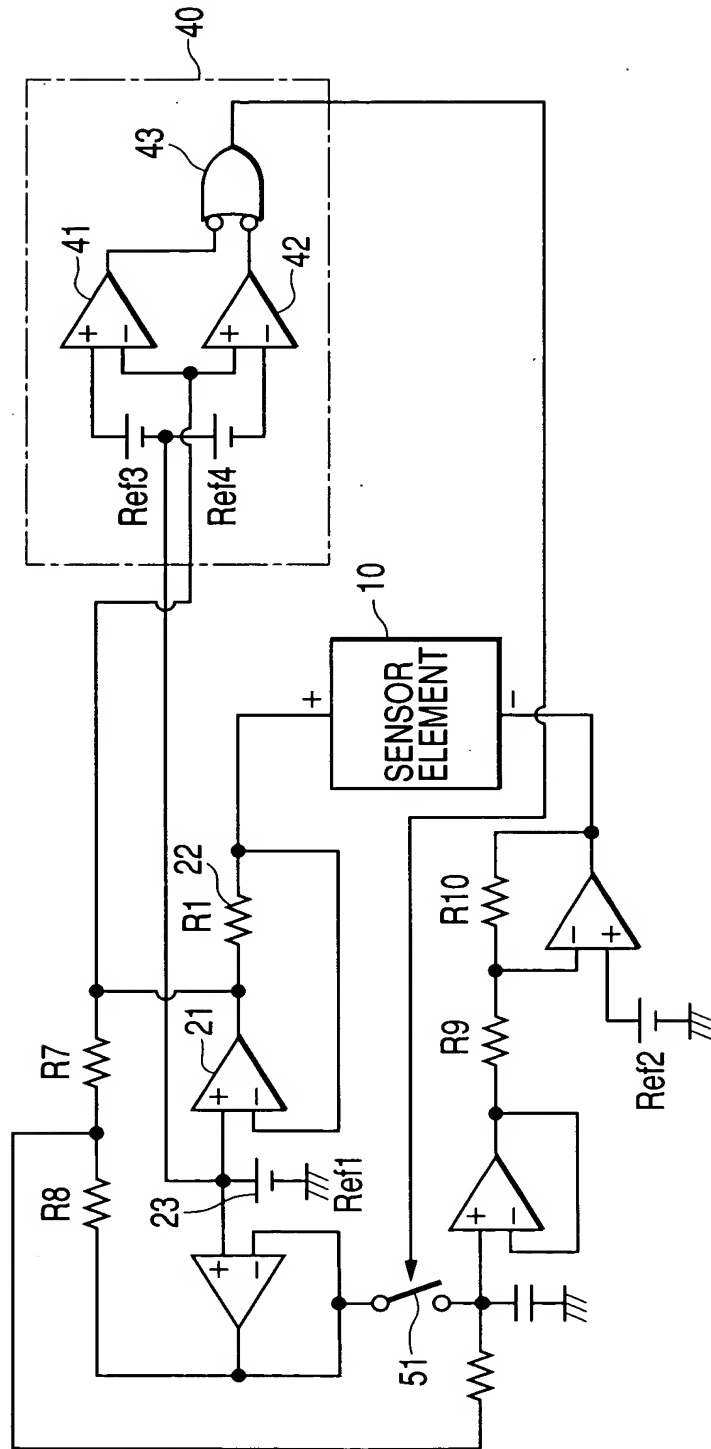


FIG. 15

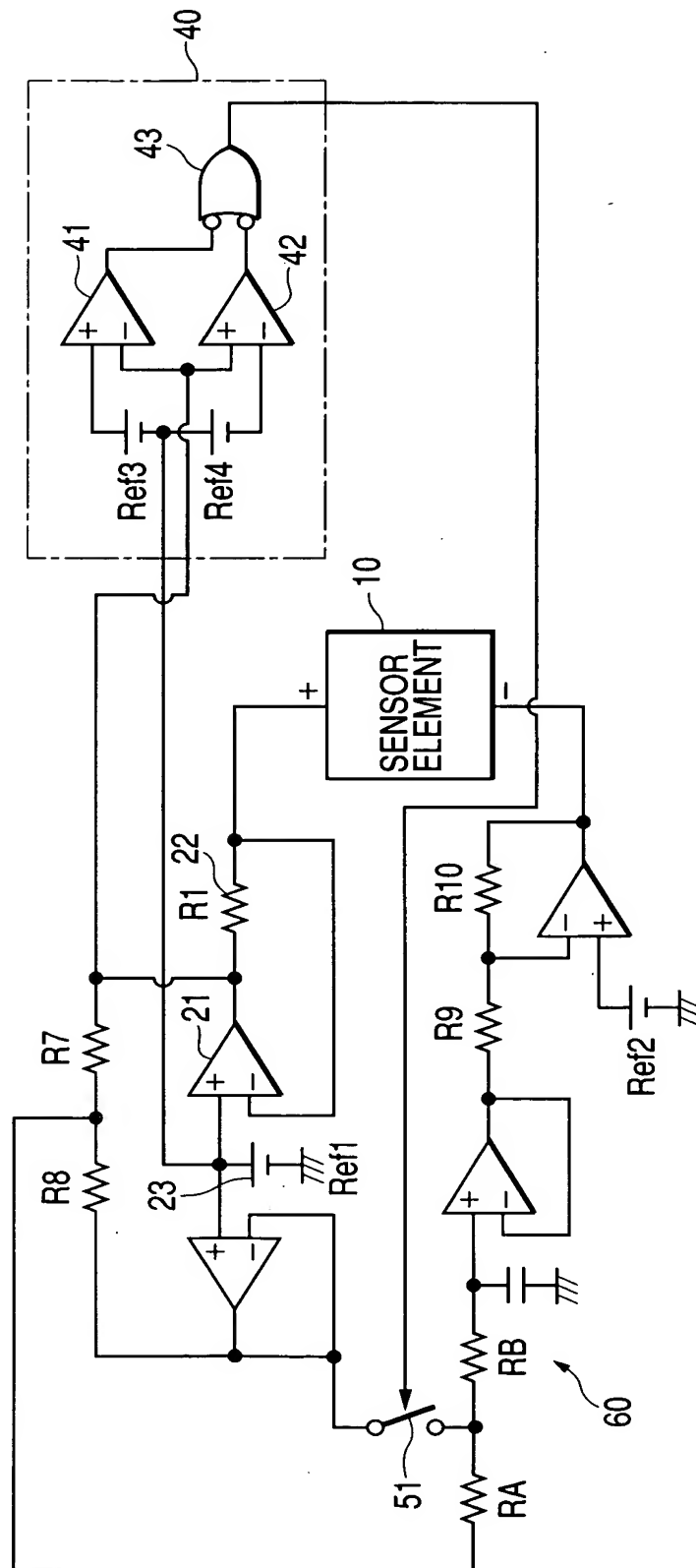


FIG. 16